

# **NIEHS Awarded Competing Grants - Fiscal Year 2008**

| <b>Principal Investigator</b>  | <b>Grant Number</b> | <b>Grantee Institution</b>               | <b>Project Title</b>  |
|--------------------------------|---------------------|--|---|
| <b>Research Project Grants</b> |                     |  |   |
| Abdel-Malek, Zalfa A.          | 2R01ES009110-10     | University Of Cincinnati                 | Signaling Pathways for UV-Induced Melanogenic Response                            |
| Anger, Wyndham Kent            | 1R01ES016308-01     | Oregon Health And Science University     | Biomarkers of Organophosphorus Pesticide-Induced Neurotoxicity                    |
| Atchison, William D            | 2R01ES003299-19A2   | Michigan State University                | Neurotoxic Mechanism of Methylmercury Poisoning                                   |
| Bain, Lisa J                   | 1R15ES016640-01     | Clemson University                       | Mechanisms of Arsenic-Induced Developmental Toxicity                              |
| Barchowsky, Aaron              | 1R01ES013781-01A2   | University Of Pittsburgh At Pittsburgh   | Mechanisms for Arsenic-Induced Vascular Disease                                   |
| Belanger, Kathleen P.          | 1R01ES016317-01A1   | Yale University                          | Effect of Air Pollution and Traffic on Birth Outcomes                             |
| Belinsky, Steven A             | 1R01ES015262-01A2   | Lovelace Biomedical & Environmental Res  | Genetic and Epigenetic Biomarkers for SCC of the Lung                             |
| Bellinger, David C             | 1R01ES016283-01     | Children's Hospital Boston               | Metal Exposure and Children's Preschool Neurodevelopment                          |
| Ben-Jonathan, Nira Na          | 1R21ES016803-01     | University Of Cincinnati                 | Exposure to Bisphenol A: Inhibition of Adiponectin Release by Human Adipocytes    |
| Boone, Michelle Dawn           | 1R15ES016435-01     | Miami University Oxford                  | Use of an Amphibian as an Alternative Model to Evaluate Effects of Contaminants o |
| Bornstein-Forst, Susan Meryl   | 2R15ES014355-02     | Marian College Of Fond Du Lac            | Physiological response of Escherichia coli to temperature and desiccation stress  |
| Bowman, Aaron B                | 1R01ES016931-01     | Vanderbilt University                    | Gene-environment interactions between manganese exposure and Huntington disease   |
| Brouxhon, Sabine M             | 1R21ES015832-01A2   | University Of Rochester                  | The role of E-cadherin in photocarcinogenesis                                     |
| Brugge, Douglas M              | 1R01ES015462-01A1   | Tufts University Boston                  | Community Assessment of Freeway Pollution and Health                              |
| Burchard, Esteban Gonzalez     | 1R01ES015794-01A1   | University Of California San Francisco   | Gene-environments and Admixture in Latino Asthmatics (GALA 2)                     |
| Campen, Matthew J              | 1R01ES014639-01A2   | Lovelace Biomedical & Environmental Res  | Enhancement Of Coronary Constriction By Combustion-Source Air Toxics              |
| Carmichael, Suzan L            | 1R01ES017060-01     | March Of Dimes Birth Defects Foundation  | Genes, environmental exposures, and hypospadias                                   |
| Carter, A Brent                | 1R01ES014871-01A2   | University Of Iowa                       | Hydrogen Peroxide and Asbestosis  |
| Chen, Jinbo                    | 1R01ES016626-01     | University Of Pennsylvania               | Statistical Methods in Genetic Epidemiology Research                              |
| Chen, Yan-Hua                  | 1R03ES016888-01     | East Carolina University                 | Roles of Claudin-7 in Lung Cancer   |
| Chesselet, Marie-Francoise     | 1P01ES016732-01     | University Of California Los Angeles     | Center for Gene Environment in Parkinson's Disease                                |
| Chusuei, Charles               | 2R15ES012167-02A1   | University Of Missouri-Rolla             | Role of Selenocystine in Lead Toxicity  |
| Cimprich, Karlene A            | 1R21ES016867-01     | Stanford University                      | Identifying Novel Mechanisms and Regulators of Genome Stability                   |
| Cockburn, Myles G              | 1R01ES015552-01A1   | University Of Southern California        | Defining critical aspects of environmental ultraviolet exposure in melanogenesis  |
| Culotta, Valeria C             | 2R01ES008996-11     | Johns Hopkins University                 | Intracellular Pathways of manganese Trafficking                                   |
| Das, Sanjoy Kumar              | 2R01ES007814-09A1   | Children's Hospital Med Ctr (Cincinnati) | Environmental Toxins and Uterine Gene Expression                                  |
| Davidson, Philip W             | 1R21ES015487-01A1   | University Of Rochester                  | Autism in a Fish Eating Population  |
| Dawson, Douglas A              | 2R15ES008019-04     | Ashland University                       | Mixture Toxicity - Evaluation of an Improved Methodology                          |
| Dobrinski, Ina                 | 1R21ES014856-01A2   | University Of Pennsylvania               | Effect of chronic low-dose phthalate exposure on the immature primate testis      |
| Doetsch, Paul W                | 2P01ES011163-06A1   | Emory University                         | Cellular Responses to Oxidative Stress in Models of Colon Cancer Development      |
| Dong, Zigang                   | 1R01ES016548-01     | University Of Minnesota Twin Cities      | The role of histone phosphorylation in arsenic-induced cell transformation and sk |
| Doorn, Jonathan A              | 1R01ES015507-01A1   | University Of Iowa                       | Organochlorine-Mediated Generation of a Dopamine Derived Neurotoxin               |
| Essigmann, John M              | 1R01ES016313-01     | Massachusetts Institute Of Technology    | The Environment as a Variable to Calibrate Mouse Models of Human Disease          |
| Farmer, Patrick J              | 1R21ES016441-01     | University Of California Irvine          | Nitroxyl adducts as structural probes of oxygenase/substrate interactions         |
| Field, Jeffrey M               | 1R01ES015662-01A2   | University Of Pennsylvania               | Mutagenesis of p53 by reactive PAH and ROS  |
| Fitsanakis, Vanessa A          | 1R15ES015628-01A1   | King College                             | Neurotoxicity of Maneb and Roundup  |
| Foster, W Michael              | 1R01ES016347-01A1   | Duke University                          | Dependency of O-3 Induced Lung Mucus Hypersecretion on NQ01                       |
| Foster, W Michael              | 1R21ES016659-01A1   | Duke University                          | Functional implications of the TNF  |
| Fruin, Scott Anthony           | 1R21ES016986-01     | University Of Southern California        | Remote Sensing of Wildfire Smoke Exposures to Assess Health Effects               |
| Fuentes, Montserrat            | 1R01ES014843-01A2   | North Carolina State University Raleigh  | A Spatial-Temporal Modleing Approach for Environmental Epidemiological Data       |
| Gelineau-Van Waes, Janee       | 1R21ES016382-01A2   | University Of Nebraska Medical Center    | Material Fumonisin Exposure and Pregnancy Outcome: Decoding the Sphingolipid Immu |
| Gershon, Robyn R               | 1R21ES015347-01A2   | Columbia University Health Sciences      | Noise Exposure in Subway Riders   |
| Ghribi, Othman                 | 1R01ES014826-01A2   | University Of North Dakota               | Cholesterol induces oxidative stress and triggers iron and A? accumulation        |
| Glazer, Peter M                | 2R01ES005775-16     | Yale University                          | Hypoxia, Genetic Instability and DNA Mismatch Repair                              |

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|--|-------------------|--|---|
| <b>Research Project Grants (Continued)</b> |                   |  |   |
| Goodman, Myron F                           | 2R01ES012259-19   | University Of Southern California        | Biochemical Basis of SOS-Induced Mutagenesis                                      |
| Groopman, John D                           | 2P01ES006052-15A1 | Johns Hopkins University                 | Molecular Biomarkers For Environmental Toxicants                                  |
| Guilarte, Tomas R                          | 2R56ES010975-06A1 | Johns Hopkins University                 | Molecular & Behavioral Effects of Low Level Mn Exposure                           |
| Halpert, James R                           | 2R01ES003619-26A1 | University Of California San Diego       | Molecular Basis of Selective P450 2B Function                                     |
| Hammond, S Katharine                       | 1R01ES014049-01A2 | University Of California Berkeley        | Neurologic and Reproductive Effects of Hexane on Workers                          |
| Hansel, Nadia N                            | 1R21ES015781-01A1 | Johns Hopkins University                 | Domestic endotoxin exposure and chronic obstructive pulmonary disease             |
| Hansen, Laura A                            | 1R01ES015585-01A1 | Creighton University                     | Mechanisms of UV-induced skin carcinogenesis                                      |
| Haynes, Erin N                             | 1R01ES016531-01   | University Of Cincinnati                 | Marietta Community Actively Researching Exposure Study                            |
| Heggland, Sara Jane                        | 1R15ES015866-01A1 | Albertson College Of Idaho               | Mechanisms of Cadmium-induced Osteotoxicity                                       |
| Hollingsworth, John W                      | 1R01ES016126-01A1 | Duke University                          | Ozone Primes Pulmonary Innate Immunity  |
| Khan, M. Firoze                            | 1R01ES016302-01   | University Of Texas Medical Br Galveston | Oxidative Stress and Autoimmunity   |
| Komuro, Hitoshi                            | 1R01ES015612-01A2 | Cleveland Clinic Lerner Col/Med-CWRU     | Effects of Methylmercury on Neuronal Cell Migration                               |
| Kordas, Katarzyna                          | 1R21ES016523-01   | Pennsylvania State University-Univ Park  | Nutritional and Heavy Metals: Effects on Child Learning and Behavior in Uruguay   |
| Kumar, Naresh                              | 1R21ES014004-01A2 | University Of Iowa                       | Mortality and Air Quality Regulation in Two Indian Cities                         |
| Laden, Francine                            | 1R01ES016284-01A1 | Brigham And Women'S Hospital             | Biomarkers Of Exposure And Effect In A Traffic Exposed Population                 |
| Ladiges, Warren C.                         | 1R21ES016572-01   | University Of Washington                 | Cancer susceptibility of XRCC1 mutant mice  |
| Laskin, Debra Lynn                         | 2R01ES004738-16A2 | Rutgers The St Univ Of Nj New Brunswick  | Activated Macrophages and Ozone Toxicity  |
| Lee, Marietta Y.                           | 1R01ES014737-01A2 | New York Medical College                 | Modification of DNA Polymerase Delta by a Novel Mechanism During Replication Stre |
| Li, Lian                                   | 1R01ES015813-01A1 | Emory University                         | Pathogenic Mechanisms of Environmental Toxicants in Parkinson's Disease           |
| Lin, Anning                                | 1R01ES015868-01A1 | University Of Chicago                    | Wiring the UV Signaling Circuitry   |
| Lipton, Stuart A                           | 1P01ES016738-01   | Burnham Institute For Medical Research   | La Jolla-Parkinson's Disease Center Grant   |
| Loch-Carusio, Rita K                       | 1R01ES014860-01A2 | University Of Michigan At Ann Arbor      | Mechanisms of Inflammation in Gestational Membranes                               |
| Lopachin, Richard Michael                  | 2R01ES003830-21A1 | Montefiore Medical Center (Bronx, Ny)    | The Nerve Terminal as the Site of Action for Type-2 Alkenes                       |
| Lu, Yi                                     | 1R01ES016865-01   | University Of Illinois Urbana-Champaign  | Selection, Characterization & Application of Paramagnetic Metal-specific DNazymes |
| Malkova, Anna L                            | 1R03ES016434-01   | Indiana Univ-Purdue Univ At Indianapolis | Visualization of break-induced replication.                                       |
| Manatunga, Amita K                         | 2R01ES012458-05   | Emory University                         | Analytical Methods: Environmental/Reproductive Epidemiology                       |
| Martin, David Ik                           | 1R21ES016581-01   | Children's Hospital & Res Ctr at Oakland | An Assay to Identify and Classify Epimutagens                                     |
| Mcconnell, Rob S                           | 1R01ES016535-01   | University Of Southern California        | Childhood Asthma, Susceptibility and Biological Activity of Ambient Particles     |
| Mcilvane, William J                        | 1R21ES015464-01A1 | Univ Of Massachusetts Med Sch Worcester  | Translational Studies of Neurobehavioral Effects of Mercury Exposure              |
| Midoro-Horiuti, Terumi                     | 1R21ES016428-01   | University Of Texas Medical Br Galveston | Perinatal exposure to environmental estrogens and asthma pathogenesis             |
| Miller, Gary W                             | 1P01ES016731-01   | Emory University                         | Emory Parkinson's Disease Collaborative Environmental Research Center             |
| Money, Nicholas P                          | 1R15ES016425-01   | Miami University Oxford                  | Spore Release Mechanisms in Indoor Fungi  |
| Mu, Fangping                               | 1R21ES016920-01A1 | Los Alamos Nat Secty-Los Alamos Nat Lab  | Predicting Reactions of Xenobiotic Compounds in Mammals                           |
| Mustacich, Debbie J                        | 1R21ES015872-01A1 | Oregon State University                  | Prophylactic Use of Vitamin E for Prevention of Occupational PAH-Induced Damage   |
| Nathanson, Neil Marc                       | 1R01ES015594-01A2 | University Of Washington                 | Organophosphate Action in the Central Nervous System                              |
| Nebert, Daniel W.                          | 1R21ES015335-01A1 | University Of Cincinnati                 | Genetic Differences in PCB-Induced Behavior                                       |
| Nel, Andre E.                              | 1R01ES016746-01   | University Of California Los Angeles     | Nano-Biological Interactions and Toxicity of Engineered Metal Oxide Particles     |
| Newschaffer, Craig J                       | 1R01ES016443-01   | Drexel University                        | Early Autism Risk Longitudinal Investigation (EARLI) Network                      |
| Oken, Emily                                | 1R01ES016314-01   | Harvard Pilgrim Health Care, Inc.        | Effects of prenatal diet and mercury exposure on child behavior and development   |
| O'Neill, Marie Sylvia                      | 1R01ES016932-01   | University Of Michigan At Ann Arbor      | Air Pollution, Inflammation and Preterm Birth: A Mechanistic Study in Mexico City |
| Ortiz, Luis A.                             | 2R01ES010859-07A1 | University Of Pittsburgh At Pittsburgh   | TNF-alpha Signaling in Silica-induced Lung Fibrosis                               |
| Padmanabhan, Vasantha                      | 1R56ES016541-01   | University Of Michigan At Ann Arbor      | Bisphenol-A and the Reproductive Dysfunction                                      |
| Philbert, Martin A                         | 2R01ES008846-08A2 | University Of Michigan At Ann Arbor      | Role of Astrocyte Injury in Neuroprotection                                       |
| Pi, Jingbo                                 | 1R01ES016005-01A1 | The Hamner Institutes                    | Paradoxical roles of Nrf2 activation in arsenic-induced beta-cell dysfunction     |
| Pinney, Susan Mengel                       | 1R21ES017176-01   | University Of Cincinnati                 | Exposure Biomarkers of Polyfluoroalkyl Compounds in Persons Living in the Ohio Ri |

| Principal Investigator<br>Research Project Grants (Continued) | Grant Number      | Grantee Institution                      | Project Title   |
|---|-------------------|--|---|
| Pollard, Kenneth Michael                                      | 1R01ES014847-01A2 | Scripps Research Institute               | Role of Daf in Systemic Autoimmunity  |
| Porter, Ned A   | 2P01ES013125-04   | Vanderbilt University                    | Lipid Peroxidation and Antioxidant Mechanisms                                     |
| Prakash, Louise   | 2R01ES012411-06   | University Of Texas Medical Br Galveston | Translesion DNA synthesis in humans   |
| Prakash, Satya  | 1R01ES016666-01A2 | University Of Texas Medical Br Galveston | Role of Rev1 in error-free replication of DNA damage and in mutation prevention   |
| Prins, Gail S   | 1R01ES015584-01A1 | University Of Illinois At Chicago        | Epigenetic Basis for Prostate Carcinogenesis following Early Estrogenic Exposures |
| Puett, Robin  | 1R03ES016619-01   | Harvard University (Sch Of Public Hlth)  | Particulate Exposure and Cardiovascular Disease in the HPFS                       |
| Runge-Morris, Melissa A                                       | 2R01ES005823-15A2 | Wayne State University                   | Sulfotransferase Expression: Implications for Toxicity                            |
| Rusyn, Ivan   | 1R01ES015241-01A1 | University Of North Carolina Chapel Hill | Bioengineering partnership to improve chemical hazard testing paradigms           |
| Sagiv, Sharon K   | 1R03ES016604-01A1 | Harvard University (Sch Of Public Hlth)  | Prenatal Exposure To Methylmercury And Childhood Behavior                         |
| Schneider, Jay S  | 1R01ES015295-01A2 | Thomas Jefferson University              | Environment and Gene Effects on Brain and Behavior                                |
| Schwander, Stephan K  | 1R21ES016928-01   | Univ Of Med/Dent Of Nj-Nj Medical School | Diesel Exhaust Particle Effects on Human Immunity to Mycobacterium tuberculosis   |
| Schwartz, Joel D  | 1R01ES014663-01A2 | Harvard University (Sch Of Public Hlth)  | Cardiovascular Effects of Particles:The Role of Oxidative Stress and Metal Pathw  |
| Sheikh, M Saeed   | 1R21ES016668-01   | Upstate Medical University               | Characterization of a novel stress-regulated anti-apoptotic ubiquitin ligase      |
| Sheng, Shaohu   | 1R01ES014701-01A2 | University Of Pittsburgh At Pittsburgh   | Epithelial Sodium Channels and Pulmonary Toxicity of Zinc                         |
| Shi, Xianglin   | 1R01ES015518-01A1 | University Of Kentucky                   | Reactive oxygen species in Ni(II) carcinogenesis                                  |
| Slitt, Angela L   | 1R01ES016042-01A1 | University Of Rhode Island               | Effect of nutritional status on MRP2 expression and biliary excretion of bispheno |
| Sonenshein, Gail E  | 2P01ES011624-06A1 | Boston University Medical Campus         | Signaling Pathways in Stages of Tumorigenesis                                     |
| Stapleton, Heather M  | 1R01ES016099-01A1 | Duke University                          | Children's Exposure to Flame Retardants: Effects on Thyroid Hormone Regulation    |
| States, J.Christopher   | 1R21ES015812-01A1 | University Of Louisville                 | Transplacental Arsenic Induced Hepatic Dysfunction and Vascular Disease           |
| Stein, T Peter  | 1R01ES015316-01A2 | Univ of Med/Dent NJ-Sch of Public Health | Phthalate Exposure and Pregnancy Outcome  |
| Styblo, Miroslav  | 1R01ES015326-01A2 | University Of North Carolina Chapel Hill | Environmental arsenic and diabetes mellitus                                       |
| Tanguay, Robert L   | 1R01ES016896-01   | Oregon State University                  | Defining nanomaterial-biological interactions to enhance biocompatibility and bio |
| Thiruchelvam, Mona  | 1R01ES016277-01   | Univ of Med/Dent NJ-R W Johnson Med Sch  | Developmental Pesticide Exposure: The Parkinson's Disease Phenotype               |
| Tielsch, James M  | 1R01ES015558-01A2 | Johns Hopkins University                 | Cookstove Replacement for Prevention of ARI and Low Birthweight in Nepal          |
| Townsend, Craig A   | 2R01ES001670-30   | Johns Hopkins University                 | Aflatoxin Biosynthesis and Iterative Type I Polyketide Synthases                  |
| Tsao, Hensin  | 1R21ES013964-01A1 | Massachusetts General Hospital           | The Role of EphA2 in UV-mediated Apoptosis  |
| Vandevoort, Catherine A                                       | 1R01ES016770-01   | University Of California Davis           | Effects of Fetal Bisphenol A Exposure on Oogenesis in Primates                    |
| Vaziri, Cyrus   | 1R01ES016280-01A1 | Boston University Medical Campus         | A Novel Role for the Fanconi Anemia Pathway in Replication of B[a]P-Adducted DNA  |
| Walker, Cheryl L  | 2R01ES008263-10A1 | University Of Texas Md Anderson Can Ctr  | Environmental Estrogens and Uterine Leiomyoma                                     |
| Waller, Lance A   | 1R01ES015525-01A1 | Emory University                         | Spatial Statistics for Disease Ecology  |
| Walther, Frans J.   | 1R01ES015330-01A2 | La Biomed Res Inst/ Harbor UCLA Med Ctr  | Synthetic surfactant and toxic chemical lung injury                               |
| Ward, Anthony John  | 1R01ES016336-01   | University Of Montana                    | Indoor woodsmoke PM and asthma: a randomized trial                                |
| Webster, Thomas F   | 1R01ES015829-01A1 | Boston University Medical Campus         | Measuring Human Exposure to PBDEs   |
| Wei, Qingyi   | 2R01ES011740-06A2 | University Of Texas Md Anderson Can Ctr  | Molecular Epidemiology of DNA Repair in Head and Neck Cancer                      |
| Wilson, Glenn L   | 2R01ES003456-22A2 | University Of South Alabama              | Environmental Beta Cell Toxins - Mechanisms of Action                             |
| Wood, David W   | 1R21ES016630-01   | Princeton University                     | Bacterial Biosensors for Endocrine Disrupting Compounds                           |
| Wu, Jun   | 1R21ES016379-01A1 | University Of California Irvine          | Exposure to mobile source air pollution and adverse birth outcomes in the Los Ang |
| Wu, Tiejian   | 1R03ES016368-01   | East Tennessee State University          | Effects of Personal Exposure to Volatile Organic Compounds on Liver Function      |
| Xia, Zhengui  | 1R01ES013696-01A2 | University Of Washington                 | Pesticides and Parkinson's Disease  |
| Yadav, Jagjit S   | 1R01ES015543-01A1 | University Of Cincinnati                 | Fungal P450 Systems In Biodegradation Of Higher Pahs-R01Es15543-01                |
| Yantasee, Wassana   | 1R21ES015620-01A1 | Battelle Pacific Northwest Laboratories  | Novel Chelators for Highly Efficient Removal of Toxic Heavy Metals in Humans      |
| Zawia, Nasser Hussein   | 1R56ES015867-01A1 | University Of Rhode Island               | Occupational exposure and the developmental-basis of AD                           |
| Zhang, Junfeng  | 1R01ES015864-01A1 | Univ of Med/Dent NJ-Sch of Public Health | Responses to Drastic Changes in Air Pollution: Reversibility and Susceptibility   |

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|-------------------------------|---------------------|-------------------------------------|---|
| <b>SBIR/STTR Grants</b>       |                     |                                     |   |
| Birks, John W                 | 1R43ES016925-01     | 2B Technologies, Inc.               | Personal Ozone Monitor  |
| Bolduc, Elroy J.              | 1R43ES016474-01     | Athena Group, Inc.                  | Teacher's iPod  |
| Chandrasekhar, Prasanna       | 2R44ES013803-02A2   | Ashwin-Ushas Corporation, Inc.      | Microwave Remediation Of Hazardous Medical Wastes                                 |
| Dertinger, Stephen D          | 2R44ES015940-02     | Litron Laboratories, Ltd.           | Versatile Mutation Assay Based on the Pig-A Locus                                 |
| Gibson, Walter M              | 1R43ES016689-01     | X-Ray Optical Systems, Inc.         | Analyzer for Monitoring Personal Environmental Exposure to Fluids and Materials   |
| Glaser, Jacob R               | 1R43ES017180-01     | Microbrightfield, Inc.              | System for comprehensive tracking and analysis of C. elegans behaviors            |
| Goswami, Kisholoy             | 2R44ES012553-02A1   | innosense, LLC                      | Sensitive To Low Ppm And Reversible Sensor For Co                                 |
| Hering, Susanne V             | 2R44ES014997-02     | Aerosol Dynamics, Inc.              | A Miniature Monitor for Time-Resolved Airborne Particle Chemistry                 |
| Jackson, George W             | 1R41ES016478-01     | Biotex, Inc.                        | In vivo Selection of Ribosomal Aptamers for Improved Bioremediation               |
| Kaluzhny, Yulia               | 1R43ES017178-01     | Mattek Corporation                  | In Vitro Assay to Determine Skin Corrosivity Packing Groups                       |
| Kostelecky, Clayton J.        | 1R43ES017192-01     | Synkera Technologies, Inc.          | Nanostructured Electrochemical Ozone Monitors                                     |
| Laiz, Jacqueline H            | 1R43ES016964-01     | Plastipure, Inc.                    | Estrogen Free Polymer Formulations for Food Packaging and Baby Products           |
| Lee, David A                  | 1R43ES016482-01     | Edenspace Systems Corporation       | Development of Enhanced Plants for Remediation of Cadmium and Lead                |
| Li, Chunqi                    | 9R44ES017366-02     | Phylonix Pharmaceuticals, Inc.      | Phase 2 SBIR: Zebrafish Cytochrome P450 Assays for Assessing Drug Metabolism and  |
| Lu, Yi                        | 2R42ES014125-02A2   | Dzymetech, Inc.                     | Catalytic DNA Biosensor for Toxic Metal Ions                                      |
| Mapes, James Preston          | 1R43ES016720-01     | Rules-Based Medicine, Inc.          | Biomarker Profiles for Carbon Monoxide Poisoning                                  |
| Mcelaney, Lisa A              | 2R44ES014495-02     | Vida Health Communications, Inc.    | Managing Environmental Risks in Pregnancy   |
| Nagarkar, Vivek V             | 2R44ES012361-03A1   | Radiation Monitoring Devices, Inc.  | A New High Performance Detector for Small Animal SPECT                            |
| Patel, Sanjay V               | 1R43ES016941-01     | Seacoast Science, Inc.              | Low-Cost Electronic Nose for Groundwater Contaminants                             |
| Polyakov, Oleg G              | 1R43ES016685-01     | Synkera Technologies, Inc.          | Formaldehyde Molecular Recognition Microsensor                                    |
| Recio, Leslie                 | 1R43ES016700-01     | Integrated Laboratory Systems, Inc. | Validation Of A Human Cd34+ Stem Cell Toxicity Bioassay                           |
| Schantz, Hans Gregory         | 1R41ES016727-01     | Q-Track Corporation                 | Location Aware Radiation Monitoring System  |
| Su, Xiao-Li                   | 1R43ES016699-01     | Biodetection Instruments, LLC       | Monolithic Reagentless Biosensor for Online Monitoring of Waterborne Pathogens    |
| Su, Xiao-Li                   | 1R43ES016704-01     | Biodetection Instruments, LLC       | A Microfluidic Biochip for Rapid Screening of Pesticide Residues                  |
| Thompson, Clay                | 2R42ES014137-02     | Blueingreen, LLC                    | Point Source Ozonation to Minimize Antibiotic Resistance                          |
| Wisnewski, Adam               | 1R41ES016728-01     | L2 Diagnostics, LLC                 | New Serodiagnostics for Isocyanate Exposure, A Major Cause of Occupational Asthma |
| <b>Research Center Grants</b> |                     |                                     |   |
| Groopman, John D              | 2P30ES003819-21     | Johns Hopkins University            | Johns Hopkins Center in Urban Environmental Health                                |
| Ho, Shuk-Mei                  | 2P30ES006096-16A1   | University Of Cincinnati            | Environmental Genetics  |
| Kaufman, Joel D               | 1P50ES015915-01     | University Of Washington            | DISCOVER Center: Cardiovascular Disease and Traffic-Related Air Pollution         |
| Santella, Regina M            | 2P30ES009089-10     | Columbia University Health Sciences | Center for Environmental Health in Northern Manhattan                             |

| Principal Investigator<br>Other Research Grants | Grant Number      | Grantee Institution                      | Project Title   |
|---|-------------------|--|---|
| Baker, Dean B.                                  | 1R13ES016969-01   | University Of California Irvine          | 2008 Joint Annual Conference of the International Society for Environmental Epide |
| Ballatori, Nazzareno                            | 1R25ES016254-01   | Mount Desert Island Biological Lab       | MDIBL STEER: Pathways of Chemical Action in Human Disease                         |
| Brisson, Jennifer A                             | 1K99ES017367-01   | University Of Southern California        | Contrasting environmental and genetic controls of alternative phenotypes          |
| Cheng, Xiaodong                                 | 1R13ES016695-01   | Federation Of Amer Soc For Exper Biology | 2008 FASEB Summer Research Conference on Biological Methylation: from DNA to Hist |
| Collins, Michael D                              | 1R13ES016930-01   | Teratology Society                       | Teratology Society 48th Annual Meeting: Student and Postdoctoral Travel Awards    |
| Cooper, Priscilla K                             | 1R13ES017216-01   | Environmental Mutagen Society            | Environmental Mutagen Society 48th Annual Meeting                                 |
| Crank, Keith N                                  | 1R13ES016916-01   | American Statistical Association         | Conference Support for the 2008 Biannual Conference on Radiation and Health, "New |
| Cranmer, Joan Marie                             | 1R13ES017188-01   | University Of Arkansas Med Scis Ltl Rock | Environmental Etiologies of Neurological Disorders: Scientific, Translational and |
| Dong, Zigang                                    | 1R13CA135806-01   | University Of Minnesota Twin Cities      | 2008 International Symposium  |
| Ettinger, Adrienne S                            | 1K01ES014907-01A1 | Harvard University (Sch Of Public Hlth)  | Genetic & Epigenetic Modifiers of Maternal-Fetal Transfer of Toxicants & Outcomes |
| Fuchs-Young, Robin S.                           | 1R25ES016147-01   | University Of Texas Md Anderson Can Ctr  | EHS Summer Undergraduate Research Program (EHS-SURP)                              |
| Holian, Andrij                                  | 1R25ES016247-01   | University Of Montana                    | Careers in Environmental Health Through Summer Research Experiences               |
| Jenny, Matthew J                                | 1K99ES017044-01   | Woods Hole Oceanographic Institution     | Metal-Regulatory Factor 1 (MTF-1) Role in Development and Stress Response         |
| Kalman, David A                                 | 1R25ES016150-01   | University Of Washington                 | Undergraduate Summer Research Experience in Environmental Health Sciences         |
| Laiosa, Michael                                 | 1K99ES016585-01   | University Of Rochester                  | Environmental Influence on T-Cell Leukemia: Role of Notch and AhR Signaling       |
| Li, Lei   | 1K99ES017177-01   | University Of Michigan At Ann Arbor      | Enzyme Catalysis of Toluene Degradation and Unusual DNA Photoproduct Repair       |
| Lund, Amie K                                    | 1K99ES016586-01   | Lovelace Biomedical & Environmental Res  | MMP-9 Activity Mediates Vascular Effects of Inhaled Environmental Air Pollutants  |
| Maizels, Nancy                                  | 1R13CA134025-01   | Gordon Research Conferences              | Mutagenesis 2008 Gordon Research Conference                                       |
| Mccauley, Linda A.                              | 1R25ES016146-01   | University Of Pennsylvania               | Summer Mentorship in Environmental Health Sciences for High School and Undergradu |
| Mccormack, Meredith                             | 1K23ES016819-01   | Johns Hopkins University                 | The Impact of Indoor Particulate Matter Exposure on Non-Allergic Asthma           |
| Miller, Marion G                                | 1R25ES016249-01   | University Of California Davis           | Short Term Educational Experiences for Research (STEER) in Environmental Health S |
| Mitra, Sankar                                   | 1U13CA136020-01   | University Of Texas Medical Br Galveston | 3rd US/EU Conference on Repair of Endogenous Genome Damage                        |
| O'Brien, Karen                                  | 1R13ES016981-01   | Virgina Organizing Project               | Forging Synergies Between Environmental Health and Green Chemistry                |
| Pitt, Bruce R                                   | 1R25ES016148-01   | University Of Pittsburgh At Pittsburgh   | University of Pittsburgh: Short-Term Educational Experiences for Research (PITT-S |
| Robertson, Andrew D                             | 1R13ES016960-01   | Keystone Symposia                        | Epigenetics, Development and Human Disease  |
| Robertson, Andrew D                             | 1R13ES017382-01   | Keystone Symposia                        | Frontiers in Reproductive Biology and Regulation of Fertility                     |
| Salahpour, Ali                                  | 1K99ES016816-01   | Duke University                          | Toxicant evaluation in mice with selective dopamine transporter overexpression    |
| Schantz, Susan L                                | 1R13ES016690-01   | University Of Illinois Urbana-Champaign  | Neurobehavioral Teratology Society: Symposium on Pesticides and Metals            |
| Sens, Donald A                                  | 1R25ES016250-01   | University Of North Dakota               | Steering Undergraduate Interest in Environmental Health Sciences at the Universit |
| Smith, Susan M.                                 | 1R13DK081216-01   | Federation Of Amer Soc For Exper Biology | 14th Biennial FASEB Summer Research Conference on Retinoids                       |
| Sobol, Robert W                                 | 1R13ES016721-01   | University Of Pittsburgh At Pittsburgh   | Annual Midwest DNA Repair Symposium   |
| Spanier, Adam J                                 | 1K23ES016304-01   | Children's Hospital Med Ctr (Cincinnati) | Prenatal Low Level Tobacco & Phthalate Exposure & Childhood Respiratory Health    |
| Spear, Robert C                                 | 1R25ES016252-01   | University Of California Berkeley        | Summer Training Program in Environmental Health Sciences for High School and Unde |
| Stanton, Mark E.                                | 1R13HD059279-01   | University Of Delaware                   | NBTS Symposium: Fetal Behavior and Neurotoxicology                                |
| Stegeman, John J                                | 1R13ES016678-01   | Gordon Research Conferences              | 2008 Oceans and Human Health Gordon Research Conference                           |
| Stone, Michael P                                | 1R13ES016957-01   | Vanderbilt University                    | ACS Symposium, Frontiers in Chemical Toxicology                                   |
| Summers, Anne O                                 | 1R13ES016679-01   | Gordon Research Conferences              | Environmental Bioinorganic Chemistry 2008 Gordon Research Conference              |
| Sun, Qinghua                                    | 1K01ES016588-01   | Ohio State University                    | Air Pollution and Microvascular Dysfunction: Leukocyte-Dependent NAD(P)H Oxidase  |
| Swan, Shanna H                                  | 1R13ES016703-01   | Gordon Research Conferences              | Environmental Endocrine Disrupters 2008 Gordon Research Conference                |
| Tang, Wan Y                                     | 1K99ES016817-01   | University Of Cincinnati                 | Estrogens/Xenoestrogens and Epigenetic Regulation of Gene Expression              |
| Trush, Michael A                                | 1R25ES016149-01   | Johns Hopkins University                 | Connecting Students to Environmental Health Research                              |
| Vlahov, David H                                 | 1R13ES017205-01   | New York Academy Of Medicine             | 7th International Conference on Urban Health                                      |
| Vore, Mary E.                                   | 1R25ES016248-01   | University Of Kentucky                   | Summer Education Experience for Research  |
| Wright, Peter Edwin                             | 1R13GM084505-01   | Scripps Research Institute               | International Conference on Magnetic Resonance in Biological Systems 2008         |

| Principal Investigator                        | Grant Number      | Grantee Institution                      | Project Title   |
|---|-------------------|--|---|
| <b>Individual Research Training Grants</b>    |                   |  |   |
| Englert, Judson M                             | 1F30ES016973-01   | University Of Pittsburgh At Pittsburgh   | A Role for Advanced Glycation End-Products in Diabetic Lung Injury                |
| Geddie, Melissa L                             | 1F32ES016493-01   | Whitehead Institute For Biomedical Res   | Metal Ion Transport in Parkinson's Disease  |
| King Heiden, Tisha C                          | 1F32ES016714-01   | University Of Wisconsin Madison          | Early life stage exposure to TCDD produces persistent, heritable cardiac toxicity |
| Kung, Vanderlene L                            | 1F30ES016487-01   | Northwestern University                  | Pseudomonas aeruginosa genomic islands and virulence factors                      |
| Mullen, Thomas D                              | 1F30ES016975-01   | Medical University Of South Carolina     | Ceramide Synthases CERS5 and CERS6 Regulate Pathways of Programmed Cell Death     |
| Potts, Rebekah G                              | 1F30ES016488-01   | University Of North Carolina Chapel Hill | Antibiotic Resistance and Virulence Gene Transfer in Environmental Pathogens      |
| Rogers, Erica N                               | 1F31ES016719-01   | University Of Louisville                 | Curcumin inhibits BPDE-induced damage by lowering the threshold of p53 activation |
| Skewis, Lynell R                              | 1F31ES016984-01   | Boston University                        | Bioavailability and toxicity of engineered nanomaterials                          |
| Taylor, Tonya N                               | 1F31ES017247-01   | Emory University                         | Reduced vesicular catecholamine storage mediates oxidant-induced neurotoxicity    |
| Valina-Toth, Anna Liza B                      | 1F31ES015935-01A1 | Wayne State University                   | Parathyroid Hormone & Vitamin D Effects on Salt Sensitivity and Vascular Function |
| Wilson, Shelly R                              | 1F30ES016490-01   | University Of Texas Medical Br Galveston | Ah receptor transcriptional regulation through a novel DNA binding site           |
| <b>Institutional Research Training Grants</b> |                   |  |   |
| Ballatori, Nazzareno                          | 2T32ES007026-31   | University Of Rochester                  | Training in Environmental Toxicology  |
| Coull, Brent A                                | 2T32ES007142-26   | Harvard University (Sch Of Public Hlth)  | Graduate Training in Biostatistics  |
| Culotta, Valeria C                            | 2T32ES007141-26   | Johns Hopkins University                 | Traning Program in Environmental Health Sciences                                  |
| Elfarra, Adnan A                              | 2T32ES007015-31   | University Of Wisconsin Madison          | Molecular & Environmental Toxicology Pre-& Postdoctoral Training Program          |
| Guengerich, F Peter                           | 1T35ES016534-01   | Vanderbilt University                    | Summer Research and Training Program in Environmental Health Sciences             |
| Hankinson, Oliver                             | 1T32ES015457-01A1 | University Of California Los Angeles     | Training in Molecular Toxicology  |
| Monks, Terrence J                             | 1T32ES016652-01   | University Of Arizona                    | Human Disease and the Interplay Between Genes and the Environment                 |
| Montine, Thomas J                             | 2T32ES007032-31   | University Of Washington                 | Environmental Pathology/Toxicology Training Program                               |
| Nebert, Daniel W                              | 1T32ES016646-01   | University Of Cincinnati                 | Gene-Environment Interactinos Training Program                                    |
| Rice, Robert H                                | 2T32ES007059-31   | University Of California Davis           | Advanced Training Environmental Health Sciences                                   |
| Swenberg, James A                             | 2T32ES007126-26   | University Of North Carolina Chapel Hill | Pre- and Postdoctoral Training in Toxicology                                      |
| Wessling-Resnick, Marianne                    | 1T32ES016645-01   | Harvard University (Sch Of Public Hlth)  | Interdisciplinary Training in Genes and the Environment                           |

| NIEHS Awarded Competing Grants (Superfund Program) - Fiscal Year 2008 |                   |  |   |
|---|-------------------|--|---|
| Principal Investigator  | Grant Number      | Grantee Institution                    | Project Title   |
| <b>Research Project Grants</b>  |                   |  |   |
| Burken, Joel G  | 1R01ES016158-01   | University Of Missouri-Rolla           | In-Situ Sediment Remediation Using Benthic Waterjet Amendment Placement           |
| May, Harold D   | 1R01ES016197-01   | Medical University Of South Carolina   | Integrating microbial biostimulation and electrolytic aeration to degrade POPs    |
| Sheahan, Thomas C   | 1R01ES016205-01   | Northeastern University                | A reactive mat to remediate contaminated sediments and reduce health risks        |
| Stanton, Bruce A.   | 2P42ES007373-14   | Dartmouth College                      | Toxic Metals in the Northeast: From Biological To Environmental Implications      |
| Hennig, Bernhard  | 2P42ES007380-12   | University Of Kentucky                 | Nutrition and Superfund Chemical Toxicity   |
| <b>SBIR/STTR Grants</b>   |                   |  |   |
| Bandera, Cesar  | 2R44ES014793-02   | Bandemar Networks, LLC                 | Mobile Just-In-Time Training of Emergency Response Personnel - Phase II           |
| Held, Christopher T.  | 1R44ES016670-01   | Metamedia Training International, Inc. | HazMat IQ Four Step System eLearning  |
| Held, Thomas H  | 2R44ES014762-02   | Metamedia Training International, Inc. | Lessons Learned from Graniteville - Phase II                                      |
| Hughes, Owen  | 2R44ES011433-02A1 | Eon Corporation                        | Ceriodaphnia DNA Microarrays  |
| James, Patrick I  | 2R44ES013622-02   | Tesla Laboratories, Inc.               | Advanced Toxic Metal Contaminant Remediation System                               |
| Kaye, Jonathan M  | 2R44ES013908-02A1 | Amethyst Research , LLC                | HazCommand: HazMat Incident Command Training                                      |
| Kirkley, Sonny E  | 1R43ES016673-01   | Information In Place, Inc.             | Viyant Hazmat Skilled Support Personnel Just in Place Performance Support         |
| Lee, David A  | 1R41ES016961-01   | Edenspace Systems Corporation          | Engineering Enhanced Plants for Arsenic Remediation                               |
| Mackay, Susan Gail  | 1R43ES016499-01   | Zeomatrix, LLC                         | Novel Zeolite Photocatalyst for Reductive Dechlorination of Chlorinated VOCs      |
| Willard, Dale M   | 1R43ES017200-01   | Advanced Microlabs, LLC                | Microchip-Based Perchlorate Analyzer for Water Remediation Monitoring and Field A |